



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,140	09/26/2001	Jerome L. Elkind	TI-33085	6252
23494	7590	08/02/2010		
TEXAS INSTRUMENTS INCORPORATED				
P O BOX 655474, M/S 3999				
DALLAS, TX 75265				
EXAMINER				
SIEFKE, SAMUEL P				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
08/02/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* JEROME L. ELKIND

---

Appeal 2009-014503  
Application 09/965,140  
Technology Center 1700

---

Before EDWARD C. KIMLIN, CHARLES F. WARREN, and  
CATHERINE Q. TIMM, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

I. STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision to reject claims 14-18, 20-24, 26-28, 32, and 36 under 35 U.S.C. § 102(b) as anticipated by Yalvac (US 5,310,526; issued May 10, 1994) and

---

<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

claims 37-41 under 35 U.S.C. § 103(a) as unpatentable over Yalvac in view of Sunshine (US 6,085,576; issued Jul. 11, 2000). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

Appellant's invention relates to an analytical testing instrument having a micro/minature vibrator device to agitate a well or fluid chamber, its contents, and its associated sensor to enable mixing of reagents and to bring analyte to the sensor surface without the need for microfluidic channels, pumps or valves (Spec. 1:7-11). Claim 14 is illustrative:

14. A portable analyzer for detecting properties of a given sample analyte comprising:

a biosensor having a sensor surface, said biosensor detecting properties of a given sample analyte at said sensor surface;

a fluid compartment for retaining therein an analyte, said fluid compartment in fluid communication with the sensor surface; and

a miniature electro-mechanical vibration device configured to vigorously shake the fluid compartment to enhance mass transport of said given sample analyte to the sensor surface for the detection of properties of said given sample analyte.

## II. DISPOSITIVE ISSUES

The following issues arise from the contentions of Appellant and the Examiner:

(1) does the evidence support the Appellant's view that the Examiner erred in finding that Yalvac teaches each and every element of the invention recited in the claims, either expressly or inherently; and

(2) does the evidence support the Appellant's view that the Examiner failed to provide sufficient reasons why the ordinary artisan would have combined the teachings of Yalvac and Sunshine to arrive at the invention recited in claims 37-41?

We answer both of these questions in the negative.

### III. ANALYSIS

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we are in complete agreement with the Examiner that the claimed subject matter is anticipated by Yalvac. Accordingly, we will sustain the Examiner's rejection for essentially those reasons expressed in the Answer.

During examination, "claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (*quoting In re Bond*, 910 F.2d 831, 833 (Fed. Cir. 1990)). Absent claim language carrying a narrow meaning, we only limit the claim based on the specification when those sources expressly disclaim the broader definition. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

Despite Appellant's arguments (*see* Br. 3 and Reply Br. 1-2), Appellant fails to define the invention, either in the claim language or by express definition in Appellant's Specification, over the chemical sensor taught by Yalvac. For example, the terms "portable" and "biosensor" are not sufficiently narrow to distinguish from the structure taught by Yalvac. Since the claims do not recite a "pocket" analyzer or define portability in terms of

any particular size, we agree with the Examiner that the degree of portability is not distinguished from the portable nature of the sensor taught by Yalvac (Ans. 5). Likewise, the term “biosensor” has not been limited to the analysis or the detection of any particular materials. As such, there is nothing to distinguish the claimed “biosensor” from any other chemical sensors known in the art in terms of structure.

We also agree with the Examiner that a “surface” of the “sensor” may be any surface that makes up the chemical sensor 10 taught by Yalvac (Ans. 6). Thus, for example, the interior surface of porous membrane 17 (the Examiner’s porous plug seal) (Yalvac, Figure 1) constitutes a “sensor surface” as part of the inner surface of cavity 13. At the porous membrane 17, the chemical sensor of Yalvac is capable of detecting properties of the sample analyte, and the porous membrane 17 is in fluid communication with the fluid compartment holding the sample analyte under pressure, e.g., the conduit defined by bushing 18 (*see* Yalvac, col. 2, l. 66 to col. 3, l. 5), as recited in the claims.

Given the Examiner’s finding that the ultrasonic transducer is attached to the body 12 of the device, it is implicit that the ultrasonic transducer 24 of Yalvac is capable of functioning “to vigorously shake the fluid compartment to enhance mass transport of said given sample analyte to the sensor surface for the detection of properties of said given sample analyte” (Ans. 4; claim 14). The evidence supports the Examiner’s finding, particularly in light of the additional supporting fact that Yalvac teaches that bushing 18 is made from plastic, instead of metal, “because this material better transmits the ultrasonic vibrations” (Yalvac, col. 3, ll. 35-38).

Appellant's further contention that there is no teaching or suggestion to combine the teachings of Yalvac and Sunshine since Sunshine relates to vapor sensors and is from an entirely different field of endeavor is unconvincing (Br. 4). The Examiner's finding that the sensor of Sunshine alternatively can be used for analyte detection in a liquid medium and thus is in the same field of endeavor as Yalvac (Ans. 6-7) is not contested by Appellant (*see generally* Reply Br.).

#### IV. CONCLUSION

On the record before us and for the reasons discussed above, we sustain the rejections maintained by the Examiner.

#### V. DECISION

The decision of the Examiner is affirmed.

#### VI. TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

cam

TEXAS INSTRUMENTS INCORPORATED  
P O BOX 655474, M/S 3999  
DALLAS TX 75265